

**Abstract:**

What is suggested herein is the use of CD154 for the detection and/or isolation of antigen-specific T lymphocytes and a method for the detection and/or isolation of antigen-specific T lymphocytes, wherein the suspension is contacted with a CD40/CD154 system inhibitor, intra- or extracellular determination of CD154 is effected, and the cells having CD154 are detected and/or isolated.